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Some Classic Researches in Typewriting

ABSTRACT

Prof. West provides a brief commentary on important studies that deal with basic factors relating to typewriting learning—of which no self-respecting typewriting teacher should be ignorant: especially since some of these studies could serve as correctives to certain dubious instructional procedures. The 23 items mentioned could well serve as basic readings in graduate and undergraduate "methods" courses.

From among the hundreds of typewriting researches completed since the early years of this century, 19 are selected for complete citation and (several others, as well) for brief comment here because (a) they deal with fundamental issues in instruction and (b) they provide, in the main, sound objective data—not windy opinion. "Classic" may be something of an exaggeration for the entire group of studies, but some of them (the early ones mainly) truly deserve that characterization.

THE ACQUISITION OF SKILL

The first and only full-scale account of the entire course of acquisition of typing skill is the pioneer work of BOOK in 1908—republished by McGraw-Hill in 1925 together with a volume for teachers (*Learning to Typewrite*). All three of these are now out of print but can probably be found in most university libraries. A vast proportion of our current instructional procedures stems directly from Book's inquiry. Later research has shown much of Book's work to be sound—but some of it has turned out to be dangerously wrong, particularly his notions about rhythm and about the higher orders of stroking habits. As a corrective to Book, FENDRICK is an absolute "must"; and both together should be basic readings for all who teach typewriting.

MOTIONS AND RHYTHM

The earliest work by COOVER and by LAHY (in the 1920's) should have killed, but unfortunately did not, the delusion perpetrated by Book that expert stroking is done in regular time intervals. The later direct study of typing rhythms by HARDING (the only one of the many studies of rhythm in which actual measurement of interstroke intervals was done on a sufficiently substantial scale)—taken together with Coover and Lahy—should serve to get rid of, once and for all, so-called "rhythm" drills or any other exercises aimed at equal interstroke intervals, whether by music, pacer, ruler tapping, or what have you.

HARTSON's review of the research on the various types of movements used in acts of skill was published a quarter-century ago, but it is as sound today as upon publication. Numerous implications for instruction in typewriting will be drawn by any perceptive reader of Hartson's article. TELFORD & SWENSON deal with muscular tension and its characteristics during the acquisition of motor skills—again with implications for typing instruction for the perceptive reader. FULTON's impeccable inquiry into the effects on performance of speed and accuracy emphases (for ballistic motions) clearly shows "speed *versus* accuracy" to be a pseudo-question. Taken together with the other studies mentioned here, it is definite that (with respect to basic stroking skill) the appropriate emphasis early in learning and most of the time thereafter is on speed—but short of the point of excessive muscular tension.

PRODUCTION TYPING

The substantial study by CRAWFORD furnishes powerful proof that the fantastic overemphasis and overinvestment of training time on building ordinary straight copy skill that has been characteristic of typing instruction is flatly wrong. Office typists are made by training them heavily on office tasks. It is surprising that a conclusion so self-evident on rational grounds should have had to await Crawford's quite recent study for empirical demonstration. In any event, further corroborative evidence (from another angle) is furnished by a small-scale correlational study by WEST (*Delta Pi Epsilon Journal,* Nov. 1960). Unfortunately, the Crawford and West studies are the only ones on the topic.

MEASUREMENT

Due to the outlandish focusing on straight copy skills, straight copy materials are the only kind for which we have any measurement data, i.e., any indices of difficulty or any large-scale compilations of standards and norms. Studies by BELL and by CHAPMAN are the basic ones on indices of straight copy difficulty, while the one by BALSLEY looks into the merits of various modes of scoring straight copy performance. (West's correlational study—see above—is also tangentially relevant.) Two major areas for inquiry, as yet untouched, are (a) indices of difficulty for real-life typing tasks and (b) accumulation of performance-standard data on office typing tasks.

READING COPY

The pioneer work of BUTSCH (corroborated later by D. L. FULLER in his 1943 doctoral thesis at Harvard, "Reading Factors in Typewriting") should disabuse the typing teacher of the notion that anything either can or should be done about reading habits for typing and should help to throw out of instruction "concentration drills" (which, like nearly all special-purpose materials based on internal characteristics of the copy, are unadulterated foolishness).

HISTORY

CURRENT's history of the development of the typewriter is a delightfully written treatment by one of the nation's leading historians. LLOYD's history of American typewriting textbooks is likewise compellingly written, and it furnishes a devastating record of the snail's pace at which research findings are translated into instructional practices and of the window dressing rather than the serious substantive changes that are found in successive editions of typewriting textbooks. (The foregoing is this writer's, not Lloyd's, interpretation.)

ERRORS

Typing errors have been among the most popular for research—consisting almost entirely either of frequency counts of various types of errors or of attempts to improve stroking accuracy through various preventive or remedial drills. Little that has ever been tried by way of error reduction has had any demonstrable merit. This is because the remedial practices have wrongly assumed that accuracy depends on the characteristics of the copy and have therefore consisted of specially contrived practice materials. Accuracy in fact depends mainly on stroking at an appropriate speed—and practice conditions based on *that* thesis have yet to be investigated. In any event, an old study by WELLS—while it has no apparent implications for instructional practices—furnishes some interesting insights into what happens to the typist's performance when he makes an error and knows it.

OVERVIEW

The textbook by DVORAK, *et al.* is more than a quarter-century old and it is, unfortunately, out of print. But it is easily the soundest and most comprehensive treatment of typing learning that has ever been done. Dvorak was years ahead of his time, and his book is full of sound things that have not yet been, but certainly should be, adopted in current instruction.

The research review by WEST (available on microfilm or in photocopy) is the only critical and analytical review of the research in typewriting learning (from the earliest years through 1956). It contains recommendations for instruction based exclusively on research evidence that was considered dependable; it is *not* an uncritical compilation of abstracts for all research, regardless of quality. A subsequent, briefer monograph by WEST (Delta Pi Epsilon Research Bulletin No. 2, 1962) brings the "story" up to more recent date. Finally, RAHE has published a comprehensive bibliography of research in typewriting from the earliest years through 1963.

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